SECTION 7.0 PROGRAM EVALUATION AND ASSESSMENT (2007)

STATE-WIDE STORM WATER MANAGEMENT PROGRAM:

EVALUATION AND ASSESSMENT PLAN

Prepared for:

Nebraska Department of Roads
MS4 Storm Water Program
SPR-PL-1(44)

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“Not everything that counts can be counted. Not everything that can be counted counts.”

Albert Einstein

We provide and maintain, in cooperation with public and private organizations, a safe, efficient, affordable, environmentally compatible and coordinated statewide transportation system for the movement of people and goods.

NDOR Mission

SWMP EVALUATION AND ASSESSMENT PLAN

Nebraska Department of Roads (NDOR) is required, according to Part III.C of the Municipal Separate Storm Sewer System (MS4) Permit, to submit a plan for evaluation and assessment of the Stormwater Management Plan (SWMP) during the first year of the Permit. This document communicates how NDOR will conduct the evaluation and assessment and what criteria will be used in the Annual Report to measure compliance. This plan will be authorized by NDEQ and executed fully by NDOR during the first Permit term. The MS4 Permit for NDOR requires an annual evaluation of:

1. Program compliance;
2. The appropriateness of identified BMPs (i.e., Minimum Control Measures [MCM]); and
3. Progress toward achieving measurable goals.

The **evaluation of program compliance** must meet the established standard for Maximum Extent Practicable (MEP) which is outlined in State and Federal regulations for small MS4s. Compliance with the conditions of the Permit and the series of steps associated with identification and implementation of the Minimum Control Measures (MCMs) will satisfy the MEP standard. Implementation of the MEP standard under the rule will typically require NDOR to develop and implement appropriate BMPs to satisfy each of the required six MCMs.[1] NDOR accomplished the identification and development criteria during development of the SWMP required by Part III.B of the MS4 Permit. Therefore, implementation, evaluation and assessment of the SWMP will constitute program compliance.

The MEP standard also addresses **evaluation of the appropriateness of identified BMPs**. In 2006, NDOR identified and developed Measurable Activities (i.e., BMPs for each MCM) that directly address each Permit requirement. This systematic effort accomplished two goals. First, NDOR identified BMPs that are *appropriate* because they address all Permit requirements. A Rationale is provided for each Measurable Activity to describe how it addresses a Permit requirement. Second, NDOR identified BMPs that are *appropriate* because they address the target audience, target pollutants, pollutions sources and water quality concerns that NDOR is required to address.

This Evaluation and Assessment Plan will use benchmarks to determine if identified BMPs continue to be appropriate. Permit requirements and the BMP Rationale were used to develop a series of Desired Outcomes that communicate compliance benchmarks for each Measurable Activity. This information is organized in the tables following this section. A Measurable Activity is inappropriate when it no longer leads to the accomplishment of the Desired Outcome.

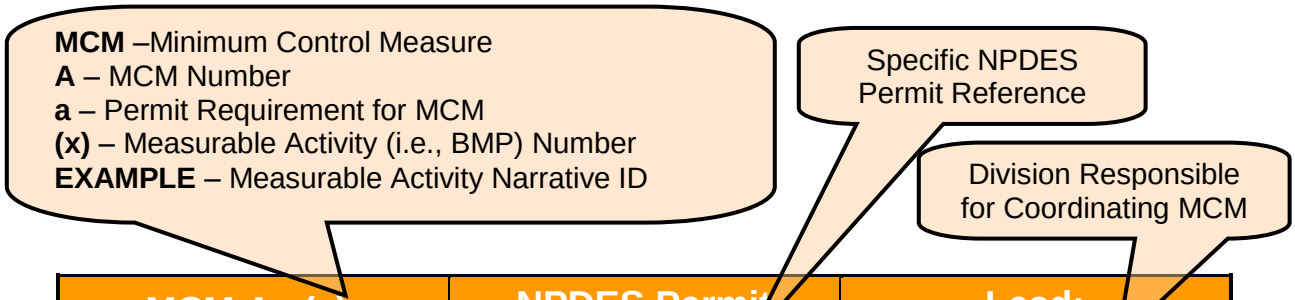
In this manner, NDOR will comply with the MEP standard by implementing appropriate BMPs that are consistent with the intent of each Permit requirement. As the SWMP is implemented, NDOR may seek to adjust Desired Outcomes based on public involvement, regulatory input, or internal evaluation and assessment. All adjustments to the Desired Outcomes will be described and justified in the Annual Report. Any changes to the SWMP will be made consistent with documentation requirements of Part V.B of the MS4 Permit.

[1] Federal Register, Volume 64, Number 235, Part II(H)(3)(a)(ii)

An **evaluation of progress toward measurable goals** will also be included within the Annual Report. Each measurable goal (i.e., Measurable Activity) has been divided into Annual Milestones. NDOR will document the progress made for each Measurable Activity based on the Annual Milestones laid out during the 2006 SWMP development process. Every reasonable effort will be made to complete the Measurable Activity according to the Annual Milestones.

Shifting priorities, budgets, staffing, or even adjusted Measurable Activities and Desired Outcomes could all result in a modification of Annual Milestones. It may be necessary to move some Milestones forward or back. All adjustments to the Annual Milestones will be described and justified in the Annual Report. Any changes to the SWMP will be made consistent with documentation requirements of Part V.B of the MS4 Permit.

Stormwater Management Program Evaluation and Assessment Table Framework



MCM A.a(x): EXAMPLE	NPDES Permit Part III.X.1	Lead: Division
Measurable Activity: Documents specific BMPs that will be accomplished by NDOR.		
Permit Requirement: Documents specific MS4 NPDES Permit requirements.		
Rationale: Describes how each Measurable Activity addresses the Permit Requirement.		
1.1.1 **Evaluation and Assessment Criteria** ***1.1.2*** **Desired Outcome 1** Describes the intended outcome accomplished by the implementation of the Measurable Activity.		
Year One	▸ Describes the progress that will be made toward measurable goal in Year One of the Permit term.	
Year Two	▸ Describes the progress that will be made toward measurable goal in Year Two of the Permit term.	
Year Three	▸ Describes the progress that will be made toward measurable goal in Year Three of the Permit term.	
Year Four and Five	▸ Describes the progress that will be made toward measurable goal in Year Four and Five of the Permit term.	

The primary goal for the SWMP is to reduce the risk of polluting stormwater runoff. The following set of BMPs has been developed to address the MS4 Permit requirements and the risk of stormwater pollution that NDOR can control.

MCM 1.1(a): Guidance	NPDES Permit Part III.B.1	Lead: Communication
Measurable Activity: Develop guidance materials on reducing storm water impacts to water bodies.		
Permit Requirement: You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.		
Rationale: Public education is a non-structural BMP that can significantly reduce the risk of stormwater pollution when it is focused on target pollutants and pollution sources.		
1.1.3 **Evaluation and Assessment Criteria** ***1.1.4*** **Desired Outcome 1** All target pollutants and pollution sources are identified in education materials. ***1.1.5*** **Desired Outcome 2** Education materials are distributed to the intended target audience. ***1.1.6*** **Desired Outcome 3** Education and outreach materials help reduce the risk of impacts from polluted stormwater discharges to water bodies.		
Year One	▸ Review available storm water education materials. ▸ Assess/inventory additional guidance needs.	
Year Two	▸ Incorporate additional information into existing material. ▸ Develop new material, if necessary.	
Year Three	▸ Identify mechanisms to disseminate material.	
Year Four and Five	▸ Revise and update material as needed.	

MCM 1.1(b): Training	NPDES Permit Part III.B.1	Lead: Communication
Measurable Activity: Provide training on reducing storm water impacts to water bodies.		
Permit Requirement: You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.		
Rationale: Stormwater training (a form of public education) focused on target pollutants and pollution sources will reduce the risk of pollutants in stormwater more than passive forms of public education because of the opportunity for public to provide direct feedback and demonstrate understanding (i.e., testing).		
1.1.7 **Evaluation and Assessment Criteria** ***1.1.8*** **Desired Outcome 1** Training is provided that is tailored for target pollutants and pollution sources. ***1.1.9*** **Desired Outcome 2** Tailored training is provided to the intended target audience. ***1.1.10*** **Desired Outcome 3** Tailored training provides opportunities for feedback on the effectiveness of content. ***1.1.11*** **Desired Outcome 4** Training opportunities are helping to reduce the risk of impacts from polluted stormwater discharges to water bodies.		
Year One	▸ Assess existing training opportunities. ▸ Identify additional training needs. ▸ Track existing training.	
Year Two	▸ Develop preliminary training matrix and schedule. ▸ Formulate an erosion and sediment control certification course. ▸ Continue to track existing training.	
Year Three	▸ Modify and create storm water training modules, as needed. ▸ Revise preliminary training matrix and schedule, as needed. ▸ Initiate an erosion and sediment control certification course. ▸ Continue to track existing training.	
Year Four and Five	▸ Provide training modules; revise and update material as needed. ▸ Continue to track existing training and certification.	

MCM 1.1(c): Outreach	NPDES Permit Part III.B.1	Lead: Communication
Measurable Activity: Participate in local and regional outreach efforts.		
Permit Requirement: You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.		
Rationale: An effective state-wide stormwater management program must be implemented at the local and regional levels in order to reduce the risk of stormwater pollution from Agency operations. Additionally, public education opportunities provided by other agencies and/or adjacent MS4s may help to reduce the risk of stormwater pollution from NDOR activities if NDOR is involved.		
1.1.12 **Evaluation and Assessment Criteria** ***1.1.13*** **Desired Outcome 1** NDOR strategically participates in local and regional outreach efforts. ***1.1.14*** **Desired Outcome 2** Participation in local and regional outreach efforts is helping to reduce the risk of impacts from polluted stormwater discharges to water bodies.		
Year One	▸ Identify local and regional outreach agencies and MS4 facilities. ▸ Update NDOR website to include Storm Water information. ▸ Investigate feasibility of having curb inlet suppliers stamp the “No Dumping” symbols on the pieces during the manufacturing.	
Year Two	▸ Coordinate with agencies and facilities, as needed. ▸ Develop mechanisms to receive and track public feedback. ▸ If feasible, establish specifications to implement and identify suppliers.	
Year Three	▸ Coordinate with agencies and facilities, as needed. ▸ Implement feedback mechanisms. ▸ If feasible, require permanent stamp for all new inlets. ▸ Report annually on the number installed.	
Year Four and Five	▸ Evaluate, revise and update based on needs and feedback from the public. ▸ Report annually on the number installed.	

MCM 2.1(a): Public Policy	NPDES Permit Part III.B.2	Lead: Communication
Measurable Activity: Continue to follow established public participation policies and procedures for NDOR projects.		
Permit Requirement: You must at a minimum, comply with state and local public notice requirements when implementing a public involvement/participation program.		
Rationale: NDOR currently maintains a published policy of public participation that is effective at reducing the risk for polluted stormwater discharges by engaging the public in all aspects of projects and operations.		
1.1.15 **Evaluation and Assessment Criteria** ***1.1.16*** **Desired Outcome 1** The public participation policy provides opportunities for developing, implementing, and reviewing elements of the stormwater management program. ***1.1.17*** **Desired Outcome 2** The policy makes efforts to reach out and engage all appropriate economic and ethnic groups.		
Year One through Five	▸ Continue to follow established Public Participation Policies and Procedures for NDOR Projects. ▸ Review and modify as needed	

MCM 2.1(b)-(c): Stewardship	NPDES Permit Part III.B.2	Lead: Communication
Measurable Activity: Engage public and track participation in environmental stewardship programs such as Adopt-A-Highway and Wetlands Bank Education.		
Permit Requirement: You must at a minimum, comply with state and local public notice requirements when implementing a public involvement/participation program.		
Rationale: Environmental stewardship programs managed by NDOR may reduce the risk of polluted stormwater discharges by connecting the public with various aspects of environmental protection and raising awareness of the water quality impacts from personal and community actions. **Additional Rationale**: Tracking public involvement in environmental stewardship programs will allow NDOR to determine if significant reductions are being made in the risk of polluted stormwater discharges.		
1.1.18 **Evaluation and Assessment Criteria** ***1.1.19*** **Desired Outcome 1** Environmental stewardship programs encourage participation by the public. ***1.1.20*** **Desired Outcome 2** Environmental stewardship programs focus on reducing target pollutants and pollution sources. ***1.1.21*** **Desired Outcome 1** Participation in environmental stewardship programs reduces the risk of polluted stormwater discharges.		
Year One	▸ Review existing environmental stewardship programs. ▸ Establish tracking mechanisms.	
Year Two	▸ Propose modifications or additional programs as needed. ▸ Implement tracking process.	
Year Three	▸ Implement modifications or additional programs as needed. ▸ Review and revise tracking process as needed.	
Year Four and Five	▸ Review and evaluate effectiveness of programs. ▸ Review and revise tracking process as needed.	

MCM 2.1(d): Public Input	NPDES Permit Part III.B.2	Lead: Roadway Design
Measurable Activity: Amend standard language for Engineering Statements to reference erosion control plans for distribution at public hearings.		
Permit Requirement: You must at a minimum, comply with state and local public notice requirements when implementing a public involvement/participation program.		
Rationale: Public hearings for upcoming construction projects are one form of public involvement included in the NDOR Public Participation Plan. Engineering Statements are one educational reference used at these meetings to inform the public of project conditions. Providing reference to the erosion control plans and water quality BMPs in these statements will reduce the risk that the public is uninformed about water quality requirements for the project and may reduce the risk of polluted stormwater pollution from construction activity. Although this MCM is focused on information/education material, it is used to promote more effective public involvement.		
1.1.22 **Evaluation and Assessment Criteria** ***1.1.23*** **Desired Outcome 1** Standard language communicates information about erosion control plans to the target audience during public participation events. ***1.1.24*** **Desired Outcome 2** Public comment about erosion control plans are recorded and taken into consideration during construction of the project.		
Year One	▸ Review standard materials and propose modifications to standard language.	
Year Two	▸ Adopt modifications to standard language.	
Year Three, Four, and Five	▸ Review and evaluate effectiveness of standard language.	

MCM 3.1(a): Mapping	NPDES Permit Part III.B.3.a	Lead: Operations
Measurable Activity: Develop map showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls.		
Permit Requirement: Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls		
Rationale: Maintaining a current series of MS4 maps will reduce the risk of polluted stormwater discharges by increasing the ability to identify target pollutants and sources, track system conditions, and quickly respond to spills and complaints which are goals for MCM 3.3(a).		

1.1.25 Evaluation and Assessment Criteria

1.1.26 Desired Outcome 1

MS4 maps provide NDOR with the information necessary to facilitate the IDDE Plan (MCM 3.3(a).

Year One	▸ Collect all existing outfall information from available sources. ▸ Prioritize MS4 areas for outfall inventory.
Year Two	▸ Establish framework for data collection of outfall inventory
Year Three	▸ Complete mapping for two NDOR Districts, beginning with priority area.
Year Four	▸ Complete mapping for two additional NDOR Districts.
Year Five	▸ Complete mapping for final two NDOR Districts. ▸ Update maps as needed.

MCM 3.2(a): Enforcement	NPDES Permit Part III.B.3.b	Lead: Operations
Measurable Activity: Develop controls to prohibit illicit stormwater discharges to the NDOR MS4.		
Permit Requirement: To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions		
Rationale: Controls such as State Statutes, Policies, Permits and Agreements are a valid form of enforceable authority necessary to reduce the risk of illicit, stormwater discharges by prohibiting the discharge of polluted stormwater or connections to the NDOR MS4 without proper authorization.		
1.1.27 **Evaluation and Assessment Criteria** ***1.1.28*** **Desired Outcome 1** Controls relate to all target pollutants and pollution sources that could contribute illicit and/or polluted stormwater discharges to the MS4 system. ***1.1.29*** **Desired Outcome 2** Controls provide sufficient enforceable authority for NDOR to reduce the risk of illicit and/or polluted stormwater discharges.		
Year One	▸ Review existing controls.	
Year Two	▸ Propose amendments to existing controls as needed.	
Year Three	▸ Finalize amendments to controls.	
Year Four	▸ Implement controls.	
Year Five	▸ Review and evaluate effectiveness of controls; update as needed.	

MCM 3.2(b): Agreements	NPDES Permit Part III.B.3.b	Lead: Operations
Measurable Activity: Develop process to coordinate with adjacent MS4 communities to remove illicit discharges that flow through an NDOR outfall, but are not the result of an NDOR activity.		
Permit Requirement: To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions		
Rationale: Formal agreements and procedures between NDOR and adjacent MS4s to remove illicit discharges in an organized and timely manner is a valid form of enforceable authority that will reduce the risk of impact from illicit and/or polluted stormwater discharges at the time they occur.		
1.1.30 **Evaluation and Assessment Criteria** ***1.1.31*** **Desired Outcome 1** Formal agreements and procedures apply for the entire NDOR MS4 coverage area. ***1.1.32*** **Desired Outcome 2** Formal agreements and procedures provide sufficient enforceable authority for NDOR to reduce the risk of impact from illicit and/or polluted stormwater discharges.		
Year One	▸ Draft process to coordinate with adjacent MS4 communities.	
Year Two	▸ Finalize process to coordinate with adjacent MS4 communities.	
Year Three	▸ Implement coordination process with adjacent MS4 communities.	
Year Four and Five	▸ Review and update process, as needed.	

MCM 3.3(a): IDDE Plan	NPDES Permit III.B.3.c *and* e	Lead: Planning/ Environmental
Measurable Activity: Develop Illicit Discharge Detection and Elimination Plan.		
Permit Requirements: Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system *and* Address the specific categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your SMS4		
Rationale: A comprehensive IDDE Plan is necessary to communicate how NDOR anticipates reducing the risk of illicit and/or polluted stormwater discharges using procedures for tracing the source of a potential illicit discharge and removing the source of the discharge. Additionally, a comprehensive IDDE Plan incorporates the details of MCM 3.1(a), 3.2(a), 3.2(b), and 3.4(a) and further includes dry weather screening and field tests of target pollutants to locate priority areas that pose the highest risk for polluted stormwater discharges.		
1.1.33 **Evaluation and Assessment Criteria** ***1.1.34*** **Desired Outcome 1** Educational elements of the IDDE Plan are provided to the target audience. ***1.1.35*** **Desired Outcome 2** The IDDE Plan addresses all target pollutants and sources, receiving water impairments, resources for tracking system conditions, and procedures for response to spills and complaints. ***1.1.36*** **Desired Outcome 3** The IDDE Plan is effective in removing illicit and/or polluted stormwater discharges.		
Year One and Two	▸ Develop Outfall Screening/ Inventory Program or review existing Outfall Screening/ Inventory Program guidance. ▸ Develop Dry Weather Screening Program or review existing Dry Weather Screening Program guidance.	
Year Three and Four	▸ Implement Outfall Screening/ Inventory Program. ▸ Implement Dry Weather Screening Program.	
Year Five	▸ Identify additional NDOR outfalls. ▸ Evaluate and revise program. Implement changes.	

MCM 3.4(a): Education	NPDES Permit Part III.B.3.d	Lead: Communication
Measurable Activity: Evaluate need to update and implement adequate NDOR internal policy, guidance, and manuals.		
Permit Requirement: Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste		
Rationale: NDOR policy, guidance, and manuals that cover the IDDE Plan and the hazards associated with illegal discharges and improper disposal of waste are a valid form of education and outreach to the public that can reduce the risk of impacts from polluted stormwater discharges.		
1.1.37 **Evaluation and Assessment Criteria** ***1.1.38*** **Desired Outcome 1** NDOR policy, guidance, and manuals target the hazards associated with illegal discharges and improper disposal of waste. ***1.1.39*** **Desired Outcome 2** NDOR policy, guidance, and manuals help to reduce the risk of impacts from stormwater discharges to water bodies.		
Year One	▸ Review available storm water education materials. ▸ Assess/ inventory additional guidance needs. ▸ Identify opportunities to partner with and share public education materials	
Year Two	▸ Incorporate additional information into existing material. ▸ Develop additional training materials. ▸ Identify mechanisms to disseminate material	
Year Three	▸ Disseminate education material.	
Year Four	▸ Evaluate program; revise education material, as needed.	
Year Five	▸ Implement program changes; re-evaluate/ revise annually.	

MCM 4.1(a): Enforcement	NPDES Permit Part III.B.4.a	Lead: Construction

Measurable Activity: Update existing Specifications and manuals to include erosion and sediment control sanction to ensure compliance.

Permit Requirement: Develop an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law.

Rationale: Specifications are a valid form of enforceable authority necessary to reduce the risk of polluted stormwater discharges from construction activity by requiring use and maintenance of erosion and sediment control BMPs, protecting water quality, and requiring qualifications associated with the NDOR Erosion and Sediment Control Certification Program (MCM 4.2(a)).

Additional Rationale: NDOR erosion and sediment control selection and design manual(s) that support Specifications are a valid form of education and outreach to the public that can reduce the risk of impacts from polluted stormwater discharges.

1.1.40 Evaluation and Assessment Criteria

1.1.41 Desired Outcome 1

Specifications relate to all erosion and sediment controls that could impact stormwater discharges from construction activity.

1.1.42 Desired Outcome 2

Specifications allow NDOR to require erosion and sediment controls, water quality protection, contractor qualifications, site plan updates and enforcement sanctions that ensure compliance with requirements.

1.1.43 Desired Outcome 3

Design standards are in place for all erosion and sediment controls necessary to reduce the risk of polluted stormwater discharges to water bodies.

1.1.44 Desired Outcome 4

Design standards for erosion and sediment controls are distributed to the target audience.

1.1.45 Desired Outcome 5

Design standards for erosion and sediment controls help to reduce the risk of impacts from polluted stormwater discharges to water bodies.

Year One	▸ Review existing Specifications to include Contractor rating mechanism for future project bids. ▸ Review Drainage Design and Erosion Control Manual. ▸ Review existing Specifications to require erosion and sediment controls. ▸ Consider Specification for Water Quality.
Year Two	▸ Propose amendments to existing Specifications and manuals, as needed.
Year Three	▸ Finalize amendments.
Year Four	▸ Implement Specifications.
Year Five	▸ Review and evaluate effectiveness of Specifications; ▸ Update as needed.

MCM 4.2(a): Implement BMPs	NPDES Permit Part III.B.4.b	Lead: Construction
Measurable Activity: Require construction site operators to implement erosion and sediment control practices.		
Permit Requirement: Develop requirements for construction site operators to implement appropriate erosion and sediment control best management practices		
Rationale: Construction site operators represent the greatest potential stormwater quality liability to NDOR and requiring the implementation of erosion and sediment control practices is an effective method for reducing the risk of stormwater pollution from construction activity. Aside from Specifications in MCM 4.1(a), requiring certification for construction site operators is a valid form of education and outreach as well as enforceable authority necessary to require implementation of erosion and sediment control practices and reduce the risk of polluted stormwater discharges to water bodies.		
1.1.46 **Evaluation and Assessment Criteria** ***1.1.47*** **Desired Outcome 1** Construction site operator certification requirements are supported in Standard Specifications and/or Supplemental Standard Specifications for Highway Construction. ***1.1.48*** **Desired Outcome 2** Construction site operator certification opportunities are distributed to the target audience. ***1.1.49*** **Desired Outcome 3** Certification requirements reduce the risk of impacts from polluted stormwater discharges to water bodies from construction activity.		
Year One	▸ Develop Erosion/Sediment Control Certification Program. ▸ Create an internal Compliance Technical Advisory Group.	
Year Two	▸ Implement Training and Certification Program. ▸ Implement Compliance Technical Advisory Group. ▸ Develop quick reference/pocket guide.	
Year Three	▸ Implement Training and Certification Program; revise as needed. ▸ Distribute quick reference/pocket guide.	
Year Four and Five	▸ Implement Training and Certification Program; revise as needed. ▸ Update/ revise guide as needed.	

MCM 4.3(a): Site Plan Review	NPDES Permit Part III.B.4.c	Lead: Planning/ Environmental
Measurable Activity: Develop procedures for site plan review to include consideration of water quality impacts.		
Permit Requirement: Develop procedures for site plan review which incorporate consideration of potential water quality impacts.		
Rationale: Sediment and Erosion control plans, developed by NDOR, consultants, or contractors, need to be reviewed for consistency with NDOR Specifications and water quality priorities in order to reduce the risk of stormwater pollution during construction activity. Water quality specifications developed for MCM 4.1(a) will support this MCM.		
1.1.50		
1.1.51 **Evaluation and Assessment Criteria** ***1.1.52*** **Desired Outcome 1** All target pollutants and potential water quality impacts from construction related activity been identified and addressed in the site plan review process. ***1.1.53*** **Desired Outcome 2** Site plan review procedures are distributed to the intended target audience. ***1.1.54*** **Desired Outcome 3** Site plan review procedures help to reduce the risk of impacts from polluted stormwater discharges.		

Year One	▸ Review existing Standard Plans for erosion and sediment control. ▸ Review SWPPP template.
Year Two	▸ Develop Erosion Control (Standard) Plan checklist for contractor. ▸ Develop SWPPP checklist for internal NDOR Environmental and Design review.
Year Three	▸ Implement checklist and procedures.
Year Four and Five	▸ Update/ revise as needed.

MCM 4.4(a): Site Inspections	NPDES Permit Part III.B.4.d	Lead: Construction

Measurable Activity: Develop and implement site inspection process.

Permit Requirement: Develop procedures for site inspection and enforcement of control measures.

Rationale: Inspections conducted for construction projects will significantly increase the potential for compliance with NPDES Construction Stormwater Permits issued to NDOR by NDEQ. Compliance with NPDES Construction Stormwater Permits will reduce the risk of discharging stormwater pollutants from construction projects as well providing a process for resolving violations and modifying inadequate BMPs. The expectations for inspections are to demonstrate:

- Specifications are effective;
- Design standards are effective;
- Certification requirements are effective; and
- Site plan review procedures are effective.

1.1.55 Evaluation and Assessment Criteria

1.1.56 Desired Outcome 1

Site inspection tools and procedures address all target pollutants and pollution sources from construction activity.

1.1.57 Desired Outcome 2

Site inspection resources are distributed to the target audience.

1.1.58 Desired Outcome 3

Annual reviews of site inspection findings improve the use of Specifications, design standards, certification requirements, and site plan review procedures and reduce the risk of polluted stormwater discharges to water bodies.

1.1.59 Desired Outcome 4

Site inspections for erosion and sediment controls help to reduce the risk of impacts from polluted stormwater discharges to water bodies.

Year One	▸ Review existing site inspection tracking and enforcement procedures.
Year Two	▸ Develop procedures and prioritization criteria for Compliance Technical Advisory Group site inspections.
Year Three	▸ Propose amendments to existing site inspection tracking and enforcement procedures.
Year Four	▸ Finalize procedures.
Year Five	▸ Implement procedures; revise as necessary.

MCM 5.1(a): Site Plan Review	NPDES Permit Part III.B.5.a	Lead: Roadway Design
Measurable Activity: Develop procedures for site plan review to include consideration of structural and/or non-structural BMPs.		
Permit Requirement: Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the NDOR MS4.		
Rationale: During project planning, site plan review that couples potential water quality impacts and known water quality impairments with structural and non-structural BMPs to protect water quality in a manner consistent with NDOR Specifications and water quality priorities will reduce the risk of on-going contributions to stormwater pollution after construction activity is completed. Water quality Specification updates developed for MCM 5.2(a) will support this MCM.		
1.1.60 **Evaluation and Assessment Criteria** ***1.1.61*** **Desired Outcome 1** All post-construction runoff water quality impacts, target pollutants, and pollution sources are identified and addressed in the site plan review process. ***1.1.62*** **Desired Outcome 2** Site plan review in the project planning phase leads to incorporation of appropriate structural and non-structural BMPs in final design.		
Year One	▸ Create an internal Compliance Technical Advisory Group. ▸ Review existing design process for BMP selection and design. ▸ Review existing Specifications to include structural and/or non-structural BMP implementation. ▸ Review Roadway Design Manual, Manual of Maintenance Procedure, and/or Drainage Design and Erosion Control Manual.	
Year Two	▸ Propose amendments to existing Specifications and manuals, as needed.	
Year Three	▸ Finalize amendments.	
Year Four	▸ Implement amendments to Specifications and manuals.	
Year Five	▸ Review and evaluate effectiveness of Specifications and manuals; ▸ Update as needed.	

MCM 5.1(b): MS4 Cooperation	NPDES Permit Part III.B.5.a	Lead: Roadway Design
Measurable Activity: Establish cooperative effort to coordinate both planning and design of structural and non-structural BMPs.		
Permit Requirement: Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the NDOR MS4.		
Rationale: The Permit coverage area for NDOR exists within the corporate limits of adjacent MS4 communities that must meet the post-construction stormwater requirements as well. Where practicable, NDOR will consider water quality protection efforts by adjacent MS4s and include design considerations into the project planning and design process. Adjacent MS4s are likely conducting a more comprehensive planning effort for the strategic improvement of local waters. It is logical for NDOR to coordinate with these efforts where practicable.		
1.1.63 **Evaluation and Assessment Criteria** ***1.1.64*** **Desired Outcome 1** NDOR provides opportunities for adjacent MS4s to influence project designs based on local efforts to improve water quality.		
Year One	▸ Review local Specifications, manuals, and ordinances for inclusion of structural and/or non-structural BMP implementation. ▸ Evaluate opportunities to coordinate with other local agencies.	
Year Two	▸ Propose amendments to NDOR Specifications and manuals to incorporate local agency procedure for structural and/or non-structural BMP implementation, as needed.	
Year Three	▸ Finalize amendments.	
Year Four	▸ Implement amendments to Specifications and manuals.	
Year Five	▸ Review and evaluate effectiveness of Specifications and manuals; ▸ Update as needed.	

MCM 5.2(a): Enforcement	NPDES Permit Part III.B.5.b	Lead: Planning/ Environmental
Measurable Activity: Update existing Specifications, manuals, and Standard Plans to address post-construction storm water runoff from new development and redevelopment projects.		
Permit Requirement: Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law.		
Rationale: Specifications are a valid form of enforceable authority to reduce the risk of polluted stormwater discharges from new development and redevelopment projects. **Additional Rationale**: Manuals and Standard Plans that support Specifications are a valid form of education and outreach to the public concerning structural and non-structural BMPs that ensure designs minimize water quality impacts, are appropriate for NDOR, and attempt to maintain pre-construction runoff conditions.		

1.1.65 Evaluation and Assessment Criteria

1.1.66 Desired Outcome 1

Specifications relate to water quality controls that could impact polluted stormwater discharges after new development and redevelopment is completed.

1.1.67 Desired Outcome 2

Specifications allow NDOR to address water quality controls for all new development and redevelopment projects.

1.1.68 Desired Outcome 3

NDOR design manuals, policies and standard plans address appropriate structural and non-structural BMPs for post-construction water quality protection.

1.1.69 Desired Outcome 4

Design manuals, policies, and standard plans reduce the risk of water quality impairments from development and redevelopment projects.

Year One	▸ Review existing design process for BMP selection and design. ▸ Review existing Specifications to include structural and/or non-structural BMP implementation. ▸ Review Roadway Design Manual, Manual of Maintenance Procedure, and/or Drainage Design and Erosion Control Manual
Year Two	▸ Propose amendments to existing Specifications, manuals, Standard Plans and as needed.
Year Three	▸ Finalize amendments.
Year Four	▸ Implement amendments to Specifications, manuals, and Standard Plans.
Year Five	▸ Review and evaluate effectiveness of Specifications, manuals and Standard Plans ▸ Update as needed

MCM 5.3(a): Design	NPDES Permit Part III.B.5.c	Lead: Roadway Design
Measurable Activity: Communicate specific maintenance requirements for the long-term operation and maintenance of stormwater BMPs.		
Permit Requirement: Ensure adequate long-term operation and maintenance of BMPs.		
Rationale: Stormwater BMPs require engineered designs to provide specific water quality protection and benefits. When BMPs fail to function as designed, the water quality protection and benefits are no longer provided. Long-term maintenance requirements must be communicated to those responsible for maintaining water quality BMPs to reduce the risk of polluted stormwater discharges.		
1.1.70 **Evaluation and Assessment Criteria** ***1.1.71*** **Desired Outcome 1** Maintenance needs for all structural BMPs are communicated within NDOR (Design-Construction-Maintenance) and to outside stakeholders so that maintenance can be completed according to MCM 6.1(c) & (d). ***1.1.72*** **Desired Outcome 2** Water Quality BMP designs are improved over time based on new information or feedback from the Operations Division, Adjacent MS4s, or other stakeholders about the effectiveness of maintenance requirements.		
Year One	▸ Evaluate the maintenance requirements of Water Quality BMPs currently designed by NDOR.	
Year Two	▸ Develop a Technical Report that documents Water Quality Design Requirements and BMP options for new development and redevelopment projects. The Technical Report will also include the long-term maintenance requirements of Water Quality BMPs.	
Year Three, Four, and Five	▸ Communicate with the Operations Division or the Adjacent MS4 about the long-term maintenance requirements of water quality BMPs designed on new projects during the design process. ▸ Document any revisions that should be made to the Water Quality Design Technical Report information concerning BMP maintenance based on information from research, pubic input, or field experience.	

MCM 6.1(a): Evaluation	NPDES Permit Part III.B.6	Lead: Operations
Measurable Activity: Perform internal evaluation of NDOR maintenance operations.		
Permit Requirement: Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of reducing pollutant runoff from *NDOR* (municipal) operations.		
Rationale: Internal evaluations are necessary to identify all target pollutants and pollution sources associated with maintenance facility operations and to ensure education and training is provided to reduce the risk of stormwater pollution.		
1.1.73 **Evaluation and Assessment Criteria** ***1.1.74*** **Desired Outcome 1** Target pollutants and pollution sources are known for each maintenance facility in the MS4 coverage area. ***1.1.75*** **Desired Outcome 2** Target pollutants and pollution sources are known for each maintenance operation conducted along the state highway system within the MS4 coverage area. ***1.1.76*** **Desired Outcome 3** Maintenance facilities and operations within the MS4 coverage area manage target pollutants and pollution sources to reduce the risk of stormwater pollution.		
Year One	▸ Develop inventory of maintenance facilities. ▸ Evaluate maintenance facilities in two Districts.	
Year Two	▸ Evaluate maintenance facilities in two additional Districts.	
Year Three	▸ Evaluate maintenance facilities in two additional Districts.	
Year Four	▸ Develop schedule of ongoing evaluations of maintenance facilities.	
Year Five	▸ Implement schedule of internal evaluations.	

MCM 6.1(b): Guidance	NPDES Permit Part III.B.6	Lead: Operations
Measurable Activity: Develop Operation and Maintenance Standard Operating Procedures (SOPs) for reducing pollutants in storm water runoff from Agency operations.		
Permit Requirement: Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of reducing pollutant runoff from municipal operations.		
Rationale: Standard Operating Procedures provide a consistent message (a form of education) to staff about personal responsibility for preventing and removing stormwater pollution from maintenance operations in the field. Improvement of existing SOPs (primarily the Maintenance Manual) and development of new SOPs – where necessary – when properly implemented will reduce the risk of water quality problems.		
1.1.77 **Evaluation and Assessment Criteria** ***1.1.78*** **Desired Outcome 1** Standard Operating Procedures communicate expectations for reducing the stormwater pollution risk from maintenance operations for known target pollutants and pollution sources. ***1.1.79*** **Desired Outcome 2** Standard Operating Procedures are used to train the target audience. ***1.1.80*** **Desired Outcome 3** NDOR operation and maintenance program SOPs clearly communicate the goal of reducing the risk of water quality problems.		
Year One	▸ Review & evaluate existing maintenance SOPs.	
Year Two	▸ Propose amendments to existing SOPs as needed.	
Year Three	▸ Incorporate amendments into existing SOPs, as needed.	
Years Four and Five	▸ Review and evaluate effectiveness of SOPs, as needed.	

MCM 6.1(c): Tracking	NPDES Permit Part III.B.6	Lead: Operations
Measurable Activity: Establish process to track permanent BMPs.		
Permit Requirement: Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of reducing pollutant runoff from municipal operations.		
Rationale: Tracking permanent BMPs may reduce the risk of polluted stormwater discharges by increasing the ability to monitor the condition of such BMPs, schedule maintenance actions (consistent with MCM 5.3(a), and quickly respond to concerns and complaints about such BMPs.		

1.1.81 Evaluation and Assessment Criteria

1.1.82 Desired Outcome 1

Maintenance needs for all structural BMPs (and the storm sewer system) are communicated within NDOR (Design-Construction-Maintenance).

1.1.83 Desired Outcome 2

The tracking program includes pre-construction review of BMP designs, inspections during construction to verify BMPs are built as designed, and post-construction inspection and maintenance of BMPs.

1.1.84 Desired Outcome 3

A system is in place to track the condition of all permanent BMPs and the storm drain system, schedule inspections and maintenance activities, and facilitate quick responses to concerns and complaints.

Year One	▸ Evaluate existing Enterprise Asset Management database. ▸ Evaluate existing process to identify structural BMPs and maintenance routines.
Year Two	▸ Propose updates to Enterprise Asset Management database. ▸ Revise process to identify new structural BMPs and routine maintenance needs.
Year Three	▸ Identify/verify existing BMP data. ▸ Begin tracking new BMPs. ▸ Revise maintenance scheduling for BMPs.
Year Four and Five	▸ Implement process to track new BMPs. ▸ Monitor maintenance procedures to report on BMP functionality.

MCM 6.1(d): Agreements	NPDES Permit Part III.B.6	Lead: Operations
Measurable Activity: Ensure existing maintenance agreements between NDOR and MS4 communities address the goal of reducing pollutant runoff from municipal operations.		
Permit Requirement: Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of reducing pollutant runoff from municipal operations.		
Rationale: Municipal maintenance agreements between NDOR and municipalities of a certain class are in place under the statutory authority of Nebraska Highway and Bridge Law. Reduction of stormwater pollution risk from municipal operations may be consistent within these agreements.		
1.1.85 **Evaluation and Assessment Criteria** ***1.1.86*** **Desired Outcome 1** Either Municipal Maintenance Agreements clearly address the goal of reducing the risk of stormwater pollution within the MS4 coverage areas or NDOR implements an alternative method to require adjacent MS4s to utilize Good Housekeeping Practices when maintaining portions of the state highway system located within the MS4 coverage area.		
Year One	▸ Review existing maintenance agreements and Statutes.	
Year Two	▸ Propose amendments to maintenance agreements and Statutes, as needed.	
Year Three	▸ Incorporate amendments to maintenance agreements and Statutes, as needed.	
Year Four and Fiver	▸ Review and evaluate effectiveness of maintenance agreements and Statutes.	

MCM 6.1(e): Education	NPDES Permit Part III.B.6	Lead: Operations
Measurable Activity: Develop Quick Reference Guides and training opportunities for maintenance employees regarding storm water responsibilities.		
Permit Requirement: Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of reducing pollutant runoff from municipal operations.		
Rationale: Maintenance employee Quick Reference Guides and training are an educational BMP that may reduce the risk of stormwater pollution from target pollutants and pollution sources associated with operations and maintenance activities. Information gathered during MCM 6.1(a) and 6.1(b) will be used to support this MCM.		
1.1.87 **Evaluation and Assessment Criteria** ***1.1.88*** **Desired Outcome 1** Individual Facility Runoff Control Plans address known target pollutants and pollution sources at all maintenance facilities within the MS4 coverage area. ***1.1.89*** **Desired Outcome 2** An additional Quick Reference Guide is developed for maintenance operations outside of maintenance facilities. ***1.1.90*** **Desired Outcome 3** Education and training that targets stormwater pollutants and pollution sources from operation and maintenance activities are provided to the target audience.		
Year One	▸ Review existing storm water education materials.	
Year Two	▸ Incorporate additional information into existing materials, if available, to include new storm water information. ▸ Develop Quick Reference Guides for operations staff on storm water responsibilities, as needed. ▸ Develop stormwater training materials focused on good housekeeping/ pollution prevention.	
Year Three, Four and Five	▸ Distribute Quick Reference Guides. ▸ Conduct stormwater training focused on good housekeeping/ pollution prevention. ▸ Review and update education materials, as needed.	

7.0 Program Evaluation And Assessment (2007)